Ag - METALS REFINING CO.
234 SILVER STREET • NEW ALBANY, INDIANA 47150
812/949-1000



December 28, 1983

U.S. EPA
Mr. Michael O'Toole - 5-HR
230 So. Dearborn Street
Chicago, Illinois 60603

Dear Mr. O'Toole:

Thank you for allowing us to submit our background letter to you for the purpose of receiving official approval to submit our proposal for the neutralizing of the cyanide tainted film chips that the FRS corporation generated during their silver recovery operation.

Ag-Metals Refining Co. is very confident that we can accomplish the neutralization to the satisfaction of the EPA. The reason for our high level of confidence is that we currently use a similar method of silver recovery as that that was used by the FRS Corp., except Ag-Metals has extended the processing to accomplish neutralization of the residue chip within acceptable limits of cyanide of less than that established by the states of Indiana and Kentucky 10 PPM (Ag-Metals' neutralized material consistently has been below 5 PPM). After neutralization with our process we have never exceeded these limits during any tests made by four outside testing laboratories or tests made by the state of Indiana or the state of Kentucky, who also took their own samples directly from our storage dumpsters and processing tanks.

Because, historically other refiners have experienced difficulty in trying to consistently conform to the above mentioned standards we, Ag-Metals Refining Co. consider our neutralizing process proprietary.

The cyanide destruction process used by Ag-Metals Refining Co. basically is accomplished utilizing the following parameters:

The initial neutralizing process is accomplished at the higher range of ph levels utilizing HTH and ph balanacing chemicals. Because of the nature and behavior of the chip material, it is of the utmost importance that the neutralizing solution is allowed to separate and surround each individual chip. Our system of agitation accomplishes this end. Interim testing of ph and cyanide levels are done during processing.

The second stage of the process is done at a lower range of ph levels, again utilizing HTH and ph balancing chemicals with the required agitation. Interim and final testing is done during this stage.

The third and final stage is basically a draining process so as to minimize the amount of neutralizing liquid loss thru adherence to neutralized chip.

Quality assurance of the neutralization process is accomplished by the incorporation of timely testing that is not only reliable, but gives results that are immediately available, allowing us to take any remedial action required during the process, causing little or no disruption of the work flow.

A closing comment on the process worth consideration, is that the process generates no effluents, nothing leaves the processing area except the neutralized chip, and generally disposal of the chip is done by 30 square yard capacity dumpsters. The safety of this quanity of material is backed by approximately forty (40) final tests and many more interim tests.

Points that favor awarding Ag-Metals Refining Co. a contract to neutralize subject material:

1.) Proven ability.
2.) Facilities in position and ready.
3.) Willing to relocate manpower and equipment to facilitate handling.
4.) Willingness, for a nominal charge to allow the EPA to bring a sample (100 to 800 lbs.) and observe processing. After processing we will return the sample to the EPA for their testing, all in one day.
5.) Ability if required to desilver the material, so as to allow it to pass E.P. toxidity test before neutralizing.

Ag-Metals Refining Co. would require the EPA's aid in obtaining the required permits and clearances for shipping, receiving and disposal of said wastes.

Looking forward to working with you and arriving at an agreement to both of our satisfactions.

Sincerely yours
Ag-Metals Refining Co.

Mark R. Degnan
Vice President

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